

APPENDIX E

ANNUAL GUNNERY TRAINING PROGRAM

This appendix contains four suggested annual training programs for the MK 19, MOD 3; one for each of the fighting and supporting active and reserve forces. Because of the high cost of M918TP and M430 HEDP rounds, live fire is kept to a minimum. Gunnery training programs have been prepared to adequately train gunners based on the mission profile of the unit. Refer to Chapter 4, Marksmanship, and Appendix I, Gunnery Exercises, for the firing tables that support these programs. A definition of each force, along with a summary of the annual gunnery training program designed for it, is included in this appendix.

E-1. LIVE-FIRE EXERCISES

LFXs allow the gunner to qualify on the MK 19 and to participate in collective gunnery exercises. Gunners practice and qualify using Tables I through IV in Chapter 4. The gun crews practice individual and collective skills using Tables I-1 through I-7 in Appendix I.

a. **Practice and Qualification Table Matrix** (Table E-1). The tables used for gunner practice and qualification are in Chapter 4. There are four scorecards available and they are used based on the type of target (hull or pop-up silhouettes) and whether the practice-qualification is during the day or during limited visibility. Each scorecard has two tables, one for practice and one for qualification. The tables have versions for hull or pop-up silhouette engagements and for the type of NVD used. Sample scorecards are shown in Figures 4-27 through 4-30 (and reproducible forms are provided in the back of this manual). Gunners will only fire one day practice-qualification and one night practice-qualification. Units should select the practice and qualification based on the light conditions, type of targets available, and type of NVDs used. The following table shows which scorecards should be used.

Conditions	Target	Night Vision Devices	Scorecard
Day	Hull	NA	Scorecard I
Day	Pop-Up	NA	Scorecard III
Limited/Night	Hull	AN/PEQ-2A mounted on the TWS mounting bracket. AN/PAS-13 mounted on the TWS mounting bracket. AN/TVS-5 upgraded with the 3d generation tube mounted on the TWS mounting bracket.	Scorecard II
Limited/Night	Pop-Up or E-Type	All night vision devices.	Scorecard IV
Limited/Night	Any type	No night vision device.	Scorecard IV

Table E-1. Practice and qualification tables.

b. **Gunnery Exercises.** Gunnery exercises allow individual gun crews to practice firing the MK 19 while performing other tasks such as mounting the gun and preparing range cards. They also allow multiple gun crews to coordinate their fires while engaging targets. Table E-1 outlines each of the seven exercises. Based on their unit's training needs and the resources available, commanders must decide on the number and type of gunnery exercises to include in their annual training program.

Table	Exercise	Number of Guns	Number of Rounds
I-1	Instructional Fire Exercise	1	26 rounds
I-2	Dismounted Range Card Exercise	1	42 rounds
I-3	Mounted Combat Exercise	1	26 rounds
I-4	Night Fire Exercise	1	22 rounds
I-5	Linear and Deep Targets	2 to 4	80 rounds per gun
I-6	Linear Targets with Depth	2 to 4	40 rounds per gun
I-7	Area Targets	4 to 6	80 rounds per gun

Table E-2. Gunnery exercises.

E-2. FIGHTING FORCES ACTIVE COMPONENT

These forces consist of infantry, military police, scout, and engineer units of the active Army. Gunners assigned to these units are required to qualify semiannually. They are also required to participate in squad/platoon-level live fires quarterly and combined arms live fire exercises (CALFEX) annually. Assistant gunners are also required to qualify or fire familiarization exercises annually.

a. *Every quarter* the unit conducts preliminary marksmanship instruction and crew drills. The Gunnery Skills Test is also conducted.

b. During the *first quarter*, semiannual gunner practice qualification and qualification exercises are performed (see Table E-1 for the correct tables to use). Assistant gunner familiarization (with a zeroed gun) using Tables I and III are also conducted (see table E-1). Unit LFXs are performed (see Tables I-5 through I-7).

- c. During the *second quarter*, unit LFXs are performed (see Tables I-1 through I-4, and I-5 through I-7).
- d. During the *third quarter*, semiannual gunner practice qualification and qualification exercises are performed (see Table E-1 for the correct tables to use). Unit LFXs are also performed (see Tables I-5 through I-7).
- e. During the *fourth quarter*, conduct LFXs or CALFEX using exercises from Tables I-5 through I-7.

E-3. SUPPORTING FORCES ACTIVE COMPONENT

These forces consist of all other units in the active component not identified as fighting force units. These guns are used primarily in defense of battalion, brigade, and division rear operations. Gunners from these forces participate in instruction fire and qualification annually.

- a. *Every quarter* the unit conducts preliminary marksmanship instruction and crew drills. The Gunnery Skills Test is also conducted.
- b. During the *first quarter*, there is no additional training.
- c. During the *second quarter*, perform LFXs (see Tables I-5 through I-7).
- d. There is no additional training during the *third quarter*.
- e. During the *fourth quarter*, annual day gunner practice qualification and qualification exercises are performed. Night practice qualification and qualification is conducted once every two years (see Table E-1 for the correct tables to use). Once every two years, assistant gunner familiarization (with a zeroed gun) using Tables I and III is also conducted (see table E-1).

E-4. FIGHTING FORCES RESERVE COMPONENTS

These forces consist of military police, engineer, and infantry units of the reserve components. Gunners for these forces must maintain a level of proficiency higher than that of the active support forces. At the same time, limited time and range resources must be considered. Gunners of these forces conduct sustainment on the trainer at least quarterly. Live fires consist of annual qualification and a unit level LFX. These forces are allocated 192 or 118 rounds each year for live fire and qualification.

- a. *Every quarter* the unit conducts preliminary marksmanship instruction and crew drills. The Gunnery Skills Test is also conducted.
- b. There is no additional training during the *first quarter*.
- c. There is no additional training during the *second quarter*.
- d. During the *third quarter*, annual gunner practice qualification and qualification exercises are performed. See Table E-1 for the correct tables to use. Once every two years, the assistant gunner fires familiarization (with a zeroed gun) using Tables I and III (see table E-1). Unit LFXs are performed (see Tables I-5 through I-7).
- e. There is no additional training during the *fourth quarter only*.

E-5. SUPPORTING FORCES RESERVE COMPONENT

These forces consist of all reserve units not specifically outlined under the paragraph on fighting forces. They are allocated 78 rounds for each year to qualify.

- a. *Every quarter* the unit conducts preliminary marksmanship instruction and crew drills. The Gunnery Skills Test is also conducted.
- b. There is no additional training during the *first quarter*.
- c. There is no additional training during the *second quarter*.
- d. During the *third quarter*, gunner practice qualification and qualification exercises are performed once every two years. See Table E-1 for the correct tables to use. Once every two years, the assistant gunner fires familiarization (with a zeroed gun) using Tables I and III (see table E-1). Unit LFXs are performed (see Table I-7).
- e. There is no additional training during the *fourth quarter*.